John J. Doody, PS & PE

Senator Andrew Maynard and Representative Antonio Guerrerra, co-chairs Joint Transportation Committee Room 2300, LOB Hartford, CT 06106

SUBJECT: PUBLIC TESTIMONY IN OPPOSITION TO SB 33,
AN ACT CONCERNING DOT PROJECT DELIVERY

Dear Senator Maynard and Representative Guerrerra;

My name is John Doody, a professional surveyor and professional engineer in West Haven, CT. I am retired from the Connecticut Department of Transportation, where I was an active member of CSEA (SEIU), representing CDOT engineers and other technical professions. I took an interest in the use of engineering consultants by CDOT over a period of 20 years before my retirement. The purpose of this testimony is to register my opposition to bill SB 33.

I would first like to address the technical shortcomings of the bill itself, which render it unworkable in its present form. The use of CMR appears to be limited to building and airport projects; there is no language allowing their use in FHWA regulations as far as I can see. Therefore my comments will be mostly directed to the design-build part of this bill, although the comments might well apply to both.

<u>Consultant Selection</u>. In Section 1(c), "...the commissioner may enter into a single contract with the design-builder, who the commissioner <u>may select from</u> among the design-builders selected and recommended by <u>a selection panel</u>." There is no reference here to the statutes that are in place defining the responsibilities of CDOT consultant selection panels (CGS 13b-20b-j). This language might leave a loophole to reconvene consultant selection panels outside the statutes. This problem arose in 1990-1991 when CDOT political appointees formed special panels to hand out engineering contracts without a record of evaluation. Also if the Commissioner may select from a list, may he not also select another firm not on the list?

<u>Consultants, Consultant Services, and Firms are defined</u> in Section 13b-20b(b-d) are defined primarily as licensed professional design services, with other professional services in addition.

¹ Auditors of Public Accounts, State of Connecticut, Report on DOT for the Fiscal Years Ending June 30, 1990 and 1991. Pages 11 & 12.

Architects and Engineers clearly fall in this category. Construction Managers-at-risk may in fact be a firm that is primarily a construction firm, with engineering staff rather than engineering ownership. This type of firm falls outside the present scope of consultant selection rules. Even the term *designer-builder* needs to be defined as a licensed architect or engineer within the scope of Section 13b-20b. The firm would need to be an engineering or architectural firm with construction staff rather than the other way around.

The consultant selection process. Under Section 13b-20(h-j), a selection panel reads all the proposals and creates a short list of consultants to interview. There are specific criteria spelled out that must be used in the evaluations. The selection panel then ranks the final five applicants and sends the list to the Commissioner, who chooses the finalist, based on quality factors only, not price. Under SB 33, the process of combining a statutory consultant selection process with a hybrid quality/low bid second step conflicts with Section 13b-20(h-j). The consultant selection process would need to be amended in order to accommodate a second step, which would involve the Commissioner soliciting additional information including price BEFORE choosing a finalist. The consultant selection process is explicit in directing the Commissioner to choose a finalist based on the panel final 5 firms recommended. By placing the consultant selection language in SB 33 properly within Section 13b-20(b-j) a lot of duplicated language is eliminated in SB 33.

Risk allocation. SB 33, Section 1(c) states the following:

The commissioner shall determine all criteria, requirements and conditions for such proposals and award and shall have <u>sole responsibility for all other aspects of the contract</u>. Such contracts shall state clearly the responsibilities of the design-builder to deliver a completed and acceptable project on a date certain, the maximum cost of the project...

The firm performing the design-build project is starting at the 30% design stage, instead of the builder bidding based on the 90% design stage. FHWA requires that CDOT have their environmental approval (NEPA) in place before the RFP is placed or the consultant selected. The commissioner has the authority to accept the best combination of quality plus bid, so the highest bid might in fact be the best. Since SB 33 states that the designer-builder must deliver a product on time and for the cost specified, and there are a lot of unknowns between 30% design and end of construction, the designer-builder must allocate risk costs to protect the firm against the unknown. If the firm is expected to deliver the product as a "black box" where CDOT doesn't need to inspect or intrude in the design-build process, then the designer-builder is able to "adjust" his work to meet the bottom line, and quality can suffer. If the commissioner assigns all kinds of criteria and conditions for the work process, which the above language appears to state, this can lead to the assignment of liability on CDOT for critical path roadblocks in the design-build process. Permitting requirements from DEEP can significantly delay and add

costs to the design-build project at the 90% design stage². In an AASHTO report, they state the following:

When developing the design criteria and RFP requirements, the agency must consider that it is no longer the designer of record. The contracting agency's function should be re-focused from strict specification compliance to verifying compliance with the terms the RFP document. The contracting agency must consider the contractual responsibilities of design-builder in meeting the design, construction and operational requirements³.

CDOT would need to change its oversight culture or risk liability in design-build projects.

Whenever the project owner (CDOT) retains responsibility for aspects of the project (such as design reviews or provision of right-of-way), the possibility exists that the owner will cause a critical path delay. In addition, force majeure events may result in project delays. If a delay occurs, the potential liability can be significant.⁴

In general, the design-bid-build process has proven to be successful for the last 50 years in Connecticut.

- The consultant designer has a self interest in delivering a good professional
 product because the firm is licensed as a professional service. They enjoy a
 good profit, but have no incentive to build in shortcuts that can negatively
 impact quality in construction. State engineers perform the same work with
 professional pride and no built in profit. Design-build designers are working for
 the builder's bottom line from the start, which may not result in a good
 investment for taxpayers.
- The builder is under pressure to closely estimate job costs based upon a nearly completed design. Profits can be enhanced through change orders needed due to unforeseen circumstances or design flaws. The builder is a check on the design as it is placed in the real world. In design-build, there are many uncertainties in permits, utilities, and rights of way acquisitions that can hold up

² Paul J Brady, submitted testimony for public hearing on SB 33.

³ AASHTO, Current Design-Build Practices for Transportation Projects,
Developed and Maintained by the AASHTO Joint Task Force on Design-Build, January 2005. Sect. 20.4

⁴Ibid., Sect. 19.4

a project, leading to liability on CDOT or putting economic pressure on the design-build firm to make up the costs somewhere within the project.

 The construction inspection process keeps the contractor honest in keeping quality up to standard. This process of checks and balances works to create a high quality engineering project. As I understand the design-build concept, the builder will inspect himself. I find that idea very troubling.

Not all projects are suitable for design-build contracts. Some examples of projects that may not be good Design-Build contracting candidates are listed below⁵:

- Major bridge rehab/repair with significant unknowns
- Rehabilitation of movable bridges
- Urban construction/reconstruction with major utilities, major subsoil problems, major R/W requirements, complex environmental permitting requirements, or other major unknowns

These examples apply to Connecticut, with urbanized arteries and roads with complex utilities and other issues that have the potential to cause delays and extra costs for the designer-builder and would have built in risk management costs.

In summary, I believe that Bill SB 33 is intended to benefit a small number of large engineering/construction firms that have design-build capabilities, most of them national firms. That fact that design-build projects meet time and cost projects may be due to the large cushion of funds required to contain the inherent risks of funding a construction process from a 30% preliminary design.

Sincerely,

John J. Doody, PS & PE

Attachment: Auditors' of Public Accounts Report for CDOT 1990-1991

⁵ Ibid., Sect. 20.1

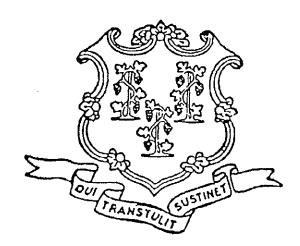
REPORT ON

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DEPARTMENT OF TRANSPORTATION .

FOR THE FISCAL YEARS ENDED JUNE 30, 1990 AND 1991

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AUDITORS OF PUBLIC ACCOUNTS STATE OF CONNECTICUT

Recommendation: The Department should comply with the applicable State Statutes when hiring consultants, and it should seek legislative relief to allow a more flexible selection process for minor projects. Appropriate Federal officials should be contacted to determine if charges for the "on-call" consultants on the above-cited projects are allowable. (See Recommendation 2.)

Condition of Records:

Other findings related to DOT's selection and use of consultants are stated below.

Highway Planning and Construction Program CFDA # 20.205

Condition:

Seventeen consultants were selected and 16 agreements were executed without DOT's compliance with statutory requirements for documentation of the evaluation criteria used in the consultant selection process. Selection panels used were limited to three members, all Deputy Commissioners, and did not include a required fourth or optional fifth member. Agreements initially totalling \$14,980,380 resulted from these selections. One agreement, effective November 1991 for \$10,297,920 for State project number 63-376 includes funding from the above-cited Federal Program.

Criteria:

The Federal OMB Circular A-87, Attachment A(C)(b) states that to be allowable, costs must be authorized or not prohibited under State laws or regulations. Section 18.36 of Part A of the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments speaks of qualificationsbased contract selection procedures that apply to Federal Highway Programs except to the extent that a state has adopted by statute a formal procedure for the procurement of such services. Connecticut has adopted such a statute (Sections 13b-20b through 13b-201 of the CGS). Sections 13b-20c and 13b-20j refer respectively to the required four members, with an optional fifth member, on consultant selection panels and to the required use of memoranda by both the selection panel and the Commissioner to indicate how the evaluation

criteria were used to determine the most qualified firms and firm.

Cause:

We were unable to determine why the State Statutes were violated.

Effect:

State Statutes were circumvented and Federal funding for the consultant services for project #63-376 may be jeopardized.

Recommendation:

DOT should comply with statutory requirements when selecting consultants. Also, the Federal grantor should be contacted to determine if Federal funding is allowable for the consultant services on project #63-376. (DOT officials have informed us that new procedures have been put into place to assure compliance with the CGS). (See Recommendation 2.)

Condition:

A consultant hired to perform systems design for three projects extending over a number of years has not been subject to the required six-month evaluations. Only one evaluation was

completed.

Criteria:

Section 13b-20f of the Connecticut General Statutes requires that the performance of all consultants who have active agreements with the Department shall be evaluated at six-month intervals and upon completion of the consultant

services.

Cause:

We were unable to identify the cause of the noncompliance.

Effect:

Evaluations to be used as part of the consultant selection process were not available because DOT failed to comply with provisions of the State Statutes.

Recommendation:

The Department should comply with State Statutes regarding required evaluations of consultants. (See Recommendation 2.)

Condition:

A consultant, in December 1988, presented to DOT a study/analysis report, prepared following the consultant's review and evaluation of DOT's functions, tasks and responsibilities. The report's proposal for a Financial Management

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